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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,632	03/19/2004	Kazuo Fukai	8305-243US (NP150-1)	7847

570 7590 10/02/2006

AKIN GUMP STRAUSS HAUER & FELD L.L.P.
ONE COMMERCE SQUARE
2005 MARKET STREET, SUITE 2200
PHILADELPHIA, PA 19103

EXAMINER

FASTOVSKY, LEONID M

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,632

Applicant(s)

FUKAI ET AL.

Examiner

Leonid M. Fastovsky

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/12/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 6 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 9 -11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoharu (JP07292943) in view of Ek et al (6,737,611).

Motoharu discloses an electric floor heating system comprising an electric heater installed under the floor ([002.003]), an upper floor 6 being laminated over the top of the aluminum veneer, a heat diffusion aluminum material comprising two aluminum sheets 5, each having a thickness of 0.135 mm ([0011]), the total thickness of .27 mm that is in a range of the claimed invention of 0.03 to 1mm as stated in the claims, and a lower plywood 4 having a thickness of 10 mm ([0011]), and a floor temperature between 27 and 29 degree C which is below 42 degree C, and therefore meets the limitations of the claims. However, he does not explicitly disclose the relationship between thicknesses of the floor parts and power in W/m square. Ek discloses a floor heating device comprising a mat 1, an electrically conductive core 2, on top of the floor heating device an aluminum film is provided (col. 5, lines 11-24), and the core having a power between 60 w/M square and 80W/m square (Fig. 2, col. 3, lines 65-67).

It would have been obvious to one having ordinary skill in the art to modify Motoharu's invention to include a material having W/M square as taught by Ek and select the

structure of different parts of the floor heating systems as a choice that would have been determined by the user having a desired result in mind since Motoharu is capable of so perform. Since Motoharu's system has a floor temperature between 27 and 29 degree C and this temperature range would maintain the body temperature in contact therewith below 42 degree C, it is deemed that one of ordinary skill, would choose the values necessary to achieve this result.

3. Claims 4-5, 7-8, 10, 12-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoharu in view of Seki et al.

Motoharu discloses substantially the claimed invention, but does not disclose a foldable heating panel and boards connected by belts. Seki teaches a foldable floor heating panel 10 composed from at least 3 heating boards¹¹. It would have been obvious to one having ordinary skill in the art to modify Motoharu's invention to include a foldable floor heating panel as taught by Seki to ease a floor heating system installation and provide belts through the holes as a design choice, because Applicant has not disclosed that these belts provide an advantage or solve a stated problem.

Allowable Subject Matter

4. Claims 6 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

6. In response to applicant's argument that the prior art does not meet the limitations of the claims, an upper floor 6 of Motoharu is laminated over the top of the aluminum veneer, a heat diffusion aluminum material comprising two aluminum sheets 5, each having a thickness of 0.135 mm ([0011]), the total thickness of .27 mm that is in a range of the claimed invention of 0.03 to 1mm as stated in the claims. It should be noted that the Elk reference was cited to show the range of power used in the floor covering art, making it obvious to use that range of power in Motoharu's device. In regards to the Seki's reference, applicant admitted by himself that this art related to a foldable panel and the foldable panel was not novel and was combinable with

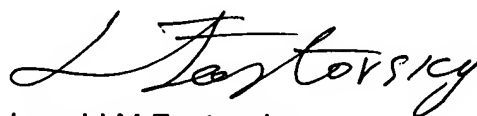
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Motoharu's reference in reply dated 9/28/05, page 11, therefore it would make it obvious to use the foldable panel in Motoharu's device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 571-272-4778. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

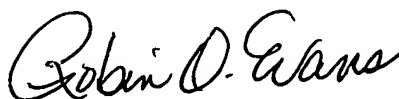
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leonid M Fastovsky
Examiner
Art Unit 3742

lmf

9/26/06



ROBIN EVANS
SUPERVISORY PATENT EXAMINER

9/26/06